

AOCABFE Newsletter
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IMPACT



**Association of Overseas Chinese
Agricultural, Biological and Food Engineers**
海外华人农业、生物与食品工程师协会

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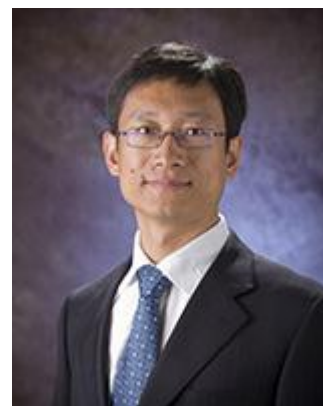
President's Message:

Dear AOC members and friends,

Happy New Year! On behalf of the AOC Board, I wish you and your family happy, healthy, and successful in the year of 2015! As AOC marches into its 15th year, we are confident that it will continue its growth trend and become an increasingly important community for overseas Chinese scientists, researchers, and educators in agricultural, biological and food engineering.

I would like to take this opportunity to give you a few updates of the programs that the AOC Board has been working and will continue to work on in the next few months:

- A group of dedicated associate editors under the leadership of the Editor Dr. Zhiming Qi are working hard to prepare this issue of the Impact newsletter. This newsletter is the first issue of Impact under the new editorial team.
- The preparation of the first webinar for professional/student development is also under way under the leadership of Drs. Hanwu Lei and Liangcheng Yang. The first webinar about how to prepare a resume is expected to be offered soon and a few more webinars will come through the rest of the year. We welcome your suggestions on the topics.
- AOC institutional membership is an important new initiative. AOC past President Dr. Lingying Zhao is leading the effort to better articulate the benefits of the institutional membership for universities, research institutions, and companies, especially those from China. We are developing application forms and a brochure for membership recruitment. We hope your institution will become our first institutional members in 2015!
- AOC Fellow membership is to recognize our distinguished members. It is another important initiative that was established in the past year and needs to be implemented this year. Vice President Dr. Hong Li is leading the



effort to finalize the nomination procedure. We encourage you to consider your nomination for this prestigious recognition of our community in the spring.

- Although it is still half a year away, the 2015 China Exchange Forum is already under planning by President-elect Dr. Lie Tang. We encourage you to submit your nominations for potential speakers and help us make this Forum successful this year.
- Don't forget to check out our website (<http://www.aoc-web.org>) where you can find most updated information about AOC, such as the current and archived Impact newsletters, AOC business meeting and banquet highlights in 2014, and excellent presentations made during the AOC China Exchange Forum in 2014. Dr. Zifei Liu and his students steward the website and they are constantly improving the website to make it more informative.

It is truly a privilege for me to work with a group of dedicated board members (including SAC Chair Dr. Fuqing Xu and Vice Chairs Kai Liu, Lei Zhu). I want to thank them for their time and commitment to make all our programs possible.

All the programs would not be successful without the support and participation from you. We hope that you will continue to support AOC, get involved in our programs, and make contributions to our community in the coming year. Together, let's make AOC a better place.

Best wishes,



Changying Li
AOC President (2014-15)
(Associate Editor SHUANGYE QIAO)

2014 CIGR Gathering

By Ms. LONG LIN and Prof. NAIQIAN ZHANG JAN. 2015

News from Members

With the opportunity that CIGR was held on September 16, 2014 in Beijing, China, AOC invited international peers and scholars to gather in Beijing. This was the first time AOC gathered in China since the gathering in 2004.

In the United States, AOC members meet at the ASABE meeting every year, while such gathering opportunities are very rare in China. The planning of the gathering was started since April 2014, with the strong support and help from academician Maohua Wang (co-founder of AOC). People involved in preparing the gathering included Dr. Man Zhang and Dr. Minzan Li from Ministry of Education Key Laboratory for Modern Precision Agriculture System Integration of China Agricultural University, Dr. Lipin Chen from National Engineering Research Center for Information Technology in Agriculture (NERCITA), and Dr. Naiqian Zhang, Dr. Lingying Zhao, Dr. Ning Wang, and Dr. Yubin Lan from US. All the participants went Dutch for this gathering except those who are over 65 years old. In total, there were about 150 participants, including 10 AOC members who traveled from US to China.

The gathering was held on the evening of September 15th in Princess Student Canteen of China Agricultural University. It was hosted by Dr. Ning Wang. Academician Maohua Wang and Dr. Naiqian Zhang (first president of AOC) both gave their welcome speeches for the event. After that, Dr. Lingying Zhao (former AOC president) and Dr. Changying Li (current AOC president) gave reports on AOC work and played the memorial video for the 10th anniversary of AOC. Additionally, some guests also gave speeches and wishes. During the event, there were

wonderful performances prepared by the College of Information and Electrical Engineering of China Agricultural University. Overall, the gathering was of great significance. It not only expanded the impact of AOC, but also promoted the academic communication and information sharing among international peers.



相聚 2014 CIGR

【林隆 张乃迁】借着国际农业与生物系统工程委员会（CIGR）第18届世界大会2014年9月16日在北京召开的机会，AOC邀请国内外农工界的同行及学者齐聚北京。这是自2004年CIGR聚会至今，时隔10年，AOC再次在中国相聚。

在美国，每年AOC都会在ASABE会议相聚，但在国内，这种机会非常少，因此此次聚会非常难得。此次聚会从2014年4月开始策划与筹备，并得到汪懋华院士（AOC的创始人之一）的大力支持与帮助。具体参与筹备的主要有中国农业大学现代精细农业系统集成研究教育部重点实验室的张漫，李民赞等老师和中国国家农业信息化工程技术研究中心（NERCITA）的陈立平老师，以及美国这边的张乃迁，赵灵英，汪宁，兰玉彬老师。聚会除了65岁以上的参与者免费外，其余实行AA制。参与此次聚会的国内外人士一共有150人左右，包括从美国去北京的AOC成员10人左右。

9月15日晚，聚会在中国农业大学公主楼学生餐厅举行。由汪宁老师担任主持。汪懋华院士和第一任AOC主席张乃迁老师分别致欢迎词。接着由AOC前任主席赵灵英老师和现任主席李长缨老师汇报AOC工作，并播放纪念AOC成立十周年影片。部分到场嘉宾也上台致辞。在活动当中，还有中国农业大学信息与电气工程学院文工团献上精彩的文艺表演。此次相聚意义重大，它不仅仅扩大了AOC的影响力，也促进国内外同行们的学术探讨，沟通交流，信息资源共享。

Wang Yang, Vice-Premier of China, met President of CIGR, Professor Sun Dawen

Translated by Ms. LONG LIN



The 18th International Commission of Agricultural and Biosystems Engineering (CIGR) World Congress was held in Beijing, China on September 16, 2014. Vice-Premier of China, Wang Yang, gave an opening speech for the event and met with President of CIGR, Professor Sun Dawen, who is also a member of Academia Europaea, Royal Irish Academy, and International Academy of Food Science and Technology.

Wang Yang pointed out that technological progress in agricultural and biosystems engineering is a powerful driving force of modern agricultural development. In recent years, China has made great achievements in agricultural and biosystems engineering such as personnel training, discipline construction, technological innovation and industrial development. In particular, achievements such as the widespread use of agricultural machinery, large-scale promotion of new crop varieties, strength of irrigation and other infrastructure, and improvement of agro-ecosystems, not only increased agricultural output but also changed the methods of agricultural

production. They also played important roles in advancing economic and social development in rural areas. For future work, we should focus on our current agricultural situation, follow international research frontier, implement strategies of innovation-driven development, improve system security, accelerate independent innovation, increase international exchange and cooperation, facilitate the close union of agricultural and biosystems engineering and agricultural production, and promote sustainable development.

Sun Dawen, the renowned Chinese scientist, was selected as President of CIGR last year, becoming the first Chinese President in the 82 years of CIGR history. Currently, he is a tenured professor in University College Dublin (UCD). He is also a world-famous academic authority of biosystems engineering and food science and engineering. Being one of the most active, creative and influential academic leaders, he enjoys a high reputation among international peers.

国际农业与生物系统工程委员会第 18 届世界大会召开 国务院副总理汪洋会见国际农业与生物系统工程委员会（CIGR）主席孙大文

【神州学人】国际农业与生物系统工程委员会（CIGR）第 18 届世界大会 9 月 16 日在京开幕，国务院副总理汪洋出席开幕式并致辞，并与国际农业与生物系统工程委员会（CIGR）主席、欧洲人文和自然科学学院院士、爱尔兰皇家科学院院士、国际食品科学院院士孙大文进行了亲切交谈。

汪洋指出，农业与生物系统工程领域的科技进步，是现代农业发展的强大动力。近些年，中国农业与生物系统工程领域的人才培养、学科建设、技术创新和产业发展，都取得很大成就。特别是农业机械广泛采用，新品种大面积推广，农田灌溉等基础设施不断加强，农业生态环境逐步改善，不仅提高了农业产量，而且改变了农业生产方式，对推动农村经济社会发展发挥了重要作用。要立足国情农情，紧盯国际前沿，深入实施创新驱动发展战略，健全体制机制保障，加快自主创新，深化国际交流合作，推动农业与生物系统工程科技和农业生产实践紧密结合，促进农业可持续发展。

据悉，著名华人科学家、欧洲人文和自然科学学院院士、爱尔兰皇家科学院院士、国际食品科学院院士孙大文去年起就任国际农业与生物系统工程委员会主席，成为该委员会 82 年历史上的首位华人主席。孙大文（Da-Wen Sun）现任爱尔兰都柏林大学（UCD）终身教授，是国际著名的生物系统工程和食品科学与工程方面的学术权威，国际上该领域最活跃、最具创造力、最有影响的学术带头人之一，在国际同行中享有极高的知名度。

Interview with AOC President Dr. Changying Li

By SHUANGYE QIAO DEC. 22, 2014

Member Interview

Biography:

Dr. Changying Li is an Associate Professor in the College of Engineering at the University of Georgia. He received his Ph.D. in Agricultural Engineering from the Pennsylvania State University in 2006 and received his Master's degree from China Agricultural University in 2003. After a short post-doc position at the University of Illinois at Urbana-Champaign, he joined University of Georgia as a faculty member in

2007. His main research interests are in developing sensing and automation technologies for agricultural and food systems.

Dr. Li first joined AOC in 2004. He was the chair of Student Activity Committee (SAC) in 2005 and 2006. After he was appointed faculty position in 2007, he acted as the IMPACT newsletter editor for one year.

He has served as member-at-large and vice-president before being elected as the president in 2014.

Q: What is it like to be the president of AOC?

A: It's a great honor for me to be the president of AOC. AOC has become a well-recognized international organization after more than a decade of its initial development. It has a strong base with many prominent professors and bright students. It attracts Chinese scholars and students around the world. I feel an enormous responsibility to lead this great organization. I need to work diligently to maintain AOC current programs and successes, as well as to create new programs. Fortunately, I am privileged to work with a group of dedicated scholars and students in our AOC Executive Board. Because of them, I feel confident that we can be good steward of AOC during 2014-2015.

Q: What do you like about AOC?

A: AOC is a community of overseas Chinese scholars and students working in agricultural, biological, and food engineering. There is a sense of home and community for the people with similar cultural backgrounds talking together and sharing our stories. AOC has a group of distinguished scholars who serve as role models and inspiration for students.

AOC offers many benefits to students and young professionals. When I was a student I have benefited from AOC by receiving the student paper award and leadership award. Later, when I became faculty, I received the early career award. My students also received recognition and awards from AOC. I'm grateful for all these opportunities. These awards and recognitions give extra distinction to our members and put them in advantaged positions in their careers.

Q: What has been your greatest challenge so far being a president?

A: First of all, AOC is not about the president, it is a team with the board members. An important task for me is to communicate with the team effectively and timely. Right now all the team members are not located at the same place. We only meet in person once a year at the ASABE meeting, so we have to rely on online tools such as the Blackboard or Skype to communicate.

Personally, my challenge is to deliver quality work with the constraint of limited time. This is perhaps true for other board members who have small kids at home, and are fully committed to research and teaching responsibilities in their respective institutions. Given this context, I was perhaps over ambitious about some of the new initiatives because changes cannot happen overnight.

Q: Could you please talk a bit about your experience in teaching and research in the US?

A: I can speak from my perspective as a faculty member in a research university in the United States. As a professor, my official appointment is 50% research and 50% teaching. This is a typical split in the US. I teach three courses per year, two in spring, one in fall. Although teaching takes a lot of time (as I am not a native speaker of English, I need to put extra effort to prepare lectures), it also offers sense of accomplishments for me when I see that my students learned and had fun in my classes.

Research-wise, my group constitutes four graduate students, one visiting scholar and one undergraduate student. As a professor I need to publish and write grant proposals to get funds to support graduate students and support the research projects. Spending my time in the lab doing bench work and working with my graduate students are my most enjoyable times.

Q: What do you think is the difference in learning between Chinese and North American universities?

A: I think the basic functions are the same in China and U.S. Graduate students need to take courses, work hard and publish papers. Ph.D. students in US perhaps get more rigorous training, tend to develop more in-depth thesis, and may have longer period of study than those in China. Students trained in the U.S. have better language skills; it is easier for them to publish in high-ranking English journals whereas in China, language barrier may hinder them publishing equally good work in international journals. However Chinese universities are currently catching up in a very rapid pace to publish in English journals.

Q: Many Chinese scholars and students have come to North America to work or study. Compared to Americans, what are our strengths and weaknesses?

A: All my Chinese students are smart. My Chinese students tend to have very good skills in math and programming. However, Chinese students sometimes could lack confidence in a broad sense, for example in communication, in competition with peers. If there is an opportunity, you have to be confident. For instance, some visiting scholars from China have very good ideas and abilities to do research, but they don't have good communication skills when they visit the U.S. This severely limits their ability to communicate and do quality work. We need to put more efforts to purposely improve the communication skill. If you do not do this, it would put you in a disadvantaged position.

Americans naturally have good language and communication skills (in most cases). They also have very good hands-on skills. They can go ahead to build something and make things happen (I am quite impressed by my American students' hands-on capabilities in my classes). For most Chinese students this skill is weaker, perhaps due to lack of training in the past. This is a very important skill for engineers, so we all need to purposely improve this skill.

Q: What is your advice to AOC students for achieving success in their career?

A: I would like to share some of the advice I received from my mentors and I strive to achieve on a daily basis. Quality work is very important. Ultimately what matters is the quality of your work. If it is worth doing, it is worth doing well. I always tell my students that you must work hard and invest a significant amount of time in research, because being smart is not a guarantee of success. For example, Ph.D. is like a marathon, not a 100m sprint. It takes a lot of dedication and you need to invest a lot of time. Being hard-working and having a good habit of work are very important. You need to write every day, you cannot write a paper in one day.

The critical thinking skill is also a very good skill to have. Because of our culture, in China we all respect

authority. But in academia, critical thinking is more important. You cannot follow authority's instructions and you cannot passively wait for something to happen. You need to generate your own ideas.

Time management is also very important. Every day, one needs to think about how to prioritize the to-do list, how to get the most important things done first. Make a plan, have a calendar system, prioritize tasks, and keep deadlines.

I also think it's important to have good working ethics and not be self-centered. It's important to work as a good team member and to be a responsible stakeholder.

Q: Where do you see AOC ten years from now, in 2024?

A: I do not have a crystal ball to predict the future. Perhaps to predict the future it's better to look at the past. In the past decade, AOC has made progress by leaps and bounds. AOC was established in 2001, I watched the AOC ten years anniversary video, and that gave a really good review of AOC's progress in the first decade, whether it's the number of members, the achievements of members, or publications in high quality journals. I am confident that AOC will have higher impact in terms of engagement with China, and the contribution it makes to bridge US, China, and other countries.

Membership will become larger and larger, that's for sure. The very important aspect is, the level of engagement with China could be higher. Science and technology development in China is growing very fast. The influence from Chinese institutions will be greater; a higher percentage of our members will be from China.

More students today will lead AOC in the next decade. I was a student when AOC was first created in 2001. Ten years from now, we will be in the hands of a new generation, and this new generation probably will have new creative ideas. AOC will be stronger, larger, creating higher impact, with the newer generation leading us to a better future.

AOC Board Meeting (September 2014)

Minutes

4:00pm-5:30pm ET on September 05, 2014

Attendees: Changying Li, Hong Li, Liangcheng Yang, Lingying Zhao, Lie Tang, Yufeng Ge, Zhiming Qi, Zifei Liu, Fuqing Xu

Note keeper: ZHIFEI LIU

1. Dr. Changying Li, AOC President called the meeting to order at about 4:25pm EDT. Agenda was approved.
2. Dr. Yufeng Ge agreed to continue to serve as treasurer of AOC. Dr. Lingying Zhao suggested appointing new officials to serve as director of membership and the AOC website, and technology coordination.
3. Dr. Zifei Liu agreed to serve by maintaining the AOC website.
4. Dr. Changying Li reviewed suggested the publication date of the upcoming Impact newsletter to be the end of September to include CIGR events.
5. Dr. Lingying Zhao reviewed achievements of AOC activities during the 2014 ASABE annual meeting at Montreal and suggested a quieter place for future SAC dinner gathering. Dr. Changying Li reviewed activities of the China Exchange session, and suggested to upload the presentations to the AOC website.
6. Dr. Lingying Zhao moved to approve the list of new AOC Board members and officials. Zifei Liu seconded and the new AOC board members were approved.
7. Dr. Lingying Zhao suggested considering members in China when planning future meeting time. A survey will be sent out to identify the most acceptable meeting time.
8. Dr. Changying Li reviewed the planning of AOC events (AOC dinner gathering) in CIGR meeting in Beijing.
9. Dr. Changying Li reviewed achievements and suggested future activities for the professional development seminar. Dr. Lingying Zhao suggested that seminar materials should be open to nonAOC members. Zifei Liu and Yufeng Ge agreed.
10. Dr. Lingying Zhao suggested promotion of institution membership from China.
11. Dr. Changying Li and Dr. Lingying Zhao introduced and reviewed the institution membership application form. Membership fee was discussed.
12. Dr. Changying Li led the discussions on foundation fund raising, honorary membership, and fellowship in the AOC. Dr. Hong Li suggested a fellowship committee should be formed and he will be in charge of Fellow and Honorary Membership in the AOC
13. Dr. Changying Li reviewed student activities/awards and suggested initiating a proposal competition and grant support for new faculty members. He suggested the deadline for the student paper competition need to be moved earlier, and a board member may be needed to help manage student activities/awards. Dr. Liangcheng Yang agreed to help manage student activities/awards.
14. Dr. Changying Li asked Dr Lie Tang to organize a training session for the maintenance of the AOC Website. Dr Lie Tang mentioned a student named Kai Liu was trained and would provide a brochure. Dropbox can be used to transfer the professional development seminar and then upload it to the website. A software need to be installed to revise the website.

15. Dr. Lingying Zhao promised to send out the updated bylaws and amendments to the members.

16. The meeting was adjourned at about 6:05 pm.

2014-2015 AOC Board members

- Lingying Zhao, Past President
- Changying Li, President
- Lei Tang, President-Elect
- Hong Li, Vice President
- Naiqian Zhang, Student Advisor

- Zhiming Qi, Impact News Letter Editor
- Zifei Liu, Secretary, Website Director
- Yufeng Ge, Treasurer
- Liangcheng Yang, Membership Director
- Haiwu Lei, Professional development director
- Yubin Lan, Foundation Director
- Fuqin Xu, SAC Chair
- Yingkuan Wang, Publication Director (IJABE), China Regional Director



SAC Board Meeting (Dec. 2014)

8:00pm-9:00 pm EDT on Dec. 21th 2014

Attendees: Fuqing Xu, Chair
Kai Liu, Lei Zhu, vice Chairs
Junhua Tong, Yu Jian, Yin Bao, Xianhui Zhao, Long Lin, Rui Xu

Notekeepers: Lei Zhu, Fuqing Xu

Minutes

1. Call for meeting and propose the agenda for improvement

Fuqing called for meeting and all members approved the meeting agenda.

2. Board member introduction

Each board member gave a brief self-introduction, including name, institution and current location, research area and hobbies etc.

New members:

Lin Long: OSU, advisor: Yebo Li, associate editor in IMPACT magazine, 2nd year of PhD, bioenergy, AD - methane production

Yu Jiang: University of Georgia. Advisor: Changying Li, 2nd year of PhD, image

Rui Xu: University of Georgia. Advisor: Changying Li, 1st year PhD student, sensor

Yin Bao: Iowa State University, Advisor: Lie Tang, expected graduate year 2016. Biomass image

3. Introduction to AOC and SAC

- A brief introduction of AOC, SAC and the IMPACT newsletter (See attachment)

- Previous SAC members:

Fuqing Xu, Kai Liu, Lei Zhu, Junhua Tong, (浙江理工大学 postdoc) Xianhui Zhao

- New SAC members

Yu Jiang, Yin Bao, Long Lin, Rui Xu

4. SAC board openings and election

Election was held for the following available positions in the SAC board. All students volunteered to fill the positions and the new board members are listed below:

- Chair: Fuqing Xu
- Vice chair: Kai Liu, Lei Zhu
- Academic Director: Long Lin. Long is currently the associate editor of IMPACT newsletter. She will be involved in proofreading the IMPACT newsletter and student award competition. She may also help organizing the AOC student webinar.
- Career director: Xianhui Zhao. Xiaohui will primarily work on professional development forum.
- Technology director (two positions, one for the website and another one for student email list and Facebook updates)
Yin Bao will take over the maintenance of email list from Kai Liu. Yu Jiang will work on SAC Facebook, and work together with academic director, career director and AOC website to update the Facebook page. Fuqing needs to contact Yongbo Wan to obtain the Facebook account for Yu Jiang.
- Activity director: Rui Xu. Rui is primarily in charge of organizing banquets during the ASABE meeting.
- Member at Large: Junhua Tong. Junhua will assist the other member's work.
- Fuqing will need to update the students' information to the related faculties.

5. Improvement and maintenance of website, email list and other communication methods.

SAC will establish a QQ group (organized by Fuqing Xu) and a Wechat group (organized by Kai Liu) as alternative methods to improve SAC impact and facilitate communication between members.

6. Update on the attendance list of ASABE 2015 Meeting

Long Lin will not attend the meeting. Junhua Tong, Xianhui Zhao and Fuqing Xu are not sure.

7. The form of next meeting

We will still using skype. Members are encouraged to arrive 10 minutes early to setup the connection. Fuqing will send out reminders before the meeting by email and by QQ and Wechat groups. Board member who cannot attend the meeting need to confirm their absence by email.

Appendix I

2014-2015 AOC Board members

- Changying Li, President
- Lingying Zhao, Past President
- Lie Tang, President-Elect
- Hong Li, Vice President
- Naiqian Zhang, Student Advisor
- Zhiming Qi, Impact Newsletter Editor
- Zifei Liu, Secretary
- Liangcheng Yang, Treasurer
- Haiwu Lei, Professional development director
- Yubin Lan, Foundation Director
- Fuqin Xu, SAC Chair
- Yingkuan Wang, Publication Director (IJABE), China Regional Director

Appendix II

Online resources

SAC Website: <http://www.aoc-web.org/joinsac.html>

SAC Facebook:

<https://www.facebook.com/aocsac?fref=nf>

SAC QQ group: 278656885

(Associate Editor LEI ZHU)



University Spotlight

China Agricultural University and Its Research Center for Precision Agriculture

By TIANJIAO ZHANG

History

China Agricultural University (CAU), directly subordinated to the Ministry of Education, is one of the top ranked key national universities in China. As the oldest agricultural higher education institution in China, CAU's history can be dated back to October 1905, when the College of Agriculture was founded by the Qing Dynasty in the Jing Shi Da Xue Tang (the former Imperial University of Peking and the present Peking University). When the People's Republic was established in 1949, Beijing Agricultural University (BAU) was founded by merging of three colleges of agriculture, namely College of Agriculture of Peking University, College of Agriculture of Tsinghua University and College of Agriculture of North China University. Beijing Agricultural Mechanization College (BAMC) was established in 1952 by joining together BAU's Department of Agricultural Machinery, North China Agricultural Machinery College, and the Ministry of Agriculture's Tractor School. BAMC was renamed Beijing Agricultural Engineering University (BAEU) in 1985. Finally in 1995, China Agricultural University was formed by merging BAU and BAEU. The former Chinese President JIANG Zemin penned CAU's name in Chinese calligraphy.



CAU's Centennial Celebration and World Agriculture Congress were grandly opened at the Great Hall of the People in Beijing on 16 September 2005. The World University Presidential Forum as the main component of the Congress was also opened on the same day. More than 300 delegates of 128 universities, colleges and institutes from 24 countries actively participated in the event, marking it a milestone in CAU's history.

Campus

CAU owns a total campus area of 157 hectares, of which constructed area is over 1.22 million square meters.

Library

The China Agricultural University Library (CAUL) is one of the most important libraries in agricultural education and research in China. The collections include both paper documents numbering more than 1.7 million volumes and over 1.47 million electronic documents. The collections emphasize agricultural science, biology, and agricultural engineering. CAUL also functions as National Agricultural Information Center of CALIS (China Academic Library & Information System) and National Foreign Textbook Center in Agriculture. Haidian District Agriculture Library is affiliated with the China Agricultural University Library. The library

provides different kinds of training courses and workshops to students and faculty every year. CAUL has been actively developing international communication and cooperation.



Life Science Building



College of Engineering Building

Gymnasium

The China Agricultural University Gymnasium is an indoor arena located on the campus of the China Agricultural University in Beijing. Construction started the first half of 2005 and was completed in July 2007. It hosted the wrestling events of the 2008 Summer Olympics. The Gymnasium's rooftop has a staggered, stair-like design. It covers an area of 23,950 square meters and has a capacity of 8,200 which will be reduced to 6000. It will then turned into a sports complex for students of China Agricultural University after the Olympic Games.

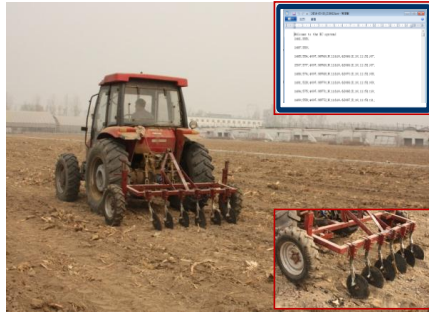
Research Centre for Precision Agriculture

Brief Introduction

The Research Center for Precision Agriculture at China Agricultural University (RCPA) was established in July, 1998 as the first research institution on precision agriculture in China. RCPA is based on the National Key Discipline on Agricultural Electrification and Automation. As a part of the Key Laboratory on Modern Precision Agriculture System Integration Research under the Ministry of Education, RCPA also has been supported by the university through the 211 & 985 Projects and administrated by the College of Information and Electrical Engineering. RCPA currently has eighteen faculty members, including four professors, nine associate professors, and five assistant professors. Eight overseas scholars from USA, UK, Germany, Grace and Japan were invited as visiting professors. Every year they come to RCPA to take short visits and give us advices and suggestions to the on-going projects PI or co-PI by RCPA. So far, RCPA has been open to all overseas and domestic scholars with a goal of promoting cooperative research and sharing facilities and others. It has been keeping close academic links with many world-class research institutions and centers on precision agriculture, world-famous agricultural machinery manufacturers, and intelligent equipment providers. During the past ten years, RCPA has organized more than ten international conferences. As a result of these efforts, RCPA has made great impact and contributions to the progress of information and computer technology applied in agriculture worldwide.

Study and Practice of Precision Agriculture

The Research Center for Precision Agriculture at China Agricultural University (RCPA) traces the development trend of precision agriculture in the world, and has jointly constructed the National Demo Farm of Precision Agriculture together with National Engineering Research Center for Information Technology in Agriculture (NERCITA)



Low-cost ion-selective electrodes array



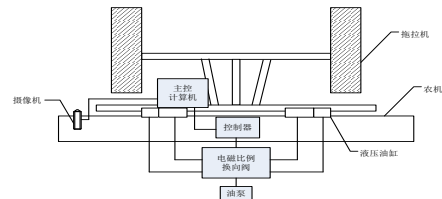
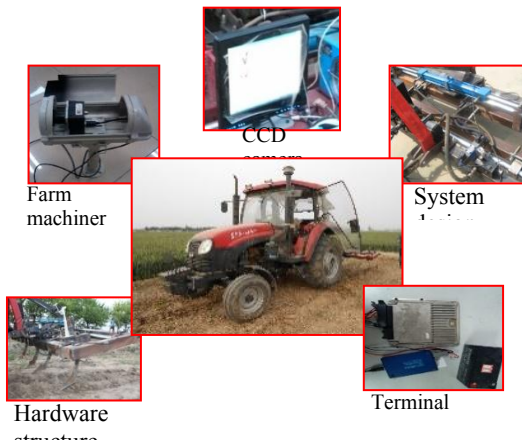
Application of spectroscopy in an apple orchard



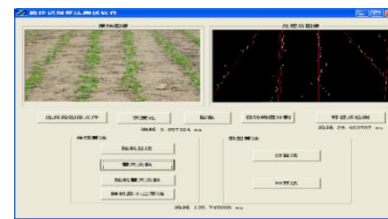
Assessment of farmland environmental quality



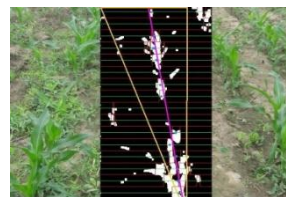
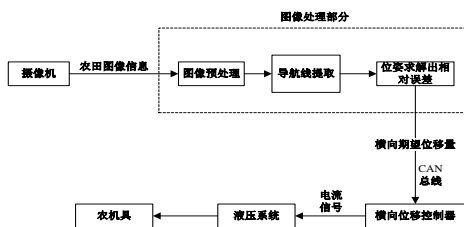
Field tests of multi-spectral camera



Interface of machine vision navigation



Hydraulic system



PLC controller

Farm Machinery Guidance System Based on Machine Vision

RCPA will continue its role as one of the leading research institutes in developing information and computer technologies for agriculture and in promoting both international and domestic academic exchanges. Through continuous basic and applied research, RCPA will make contributions to the knowledge and technology innovation, and to promote agricultural mechanization and modernization in China.

KANSAS STATE UNIVERSITY Air Quality Research and Extension Program

DR. ZHIFEI LIU
ASSISTANT PROFESSOR

Research Hotspot

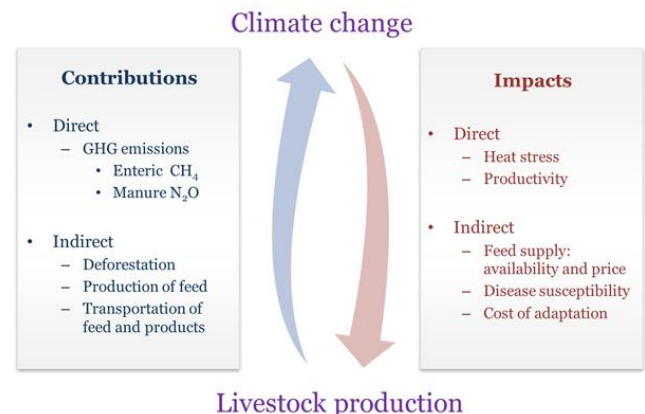


My background:

My bachelor degree is in atmospheric science from Nanjing University. After college, I worked ten years in a local environmental monitoring center. My main responsibility is environmental impact assessment, focusing on air quality. In the meantime, I spent one year in Japan as a research trainee, receiving training on environmental management. Then with my American dream, I came to the US to start my adventure in academic world. First, I obtained a Master degree in Environmental Engineering from University of Cincinnati. Then I earned a PhD degree in Biological and Agricultural Engineering from NC State, working with Dr. Lingjuan Li-Wang. My PhD work is about developing a farm emission model, and while I was in NC State, I had the chance to participate in the National Air Emissions Monitoring Study (NAEMS) project. After that, I spend almost two years at Michigan State University, working with Dr. Wendy Powers on dietary strategies for mitigating air emissions. I also worked a lot on topics related to climate change.

My current research at Kansas State University (2012-present)

Agriculture is Heart of Kansas' economy and community life. 90% of the state is farmland, 1/5 Kansans work in jobs related to agriculture and food production. Kansas is a leader in US in production of wheat and beef. There are more cattle than people. Kansas is experiencing air quality problems such as smoke from pasture burning and other air emissions from livestock production. Also, as producers face new weather patterns and regulations put in place to limit greenhouse gases emissions, there is a need for producers to mitigate and to adapt to the effects of climate change.



Since joining K-state in July 2012, I have worked on developing an integrated multi-disciplinary research and extension program in the area of agricultural air quality to assist Kansas in addressing critical environmental issues that impact the sustainability of local communities. My mission statement is 1) to advance the research-based understanding of air quality and waste management problems in agricultural systems; 2) to transfer the knowledge needed to industries, regulators, students, and the public. With support from our applied research on these issues, we aim to effectively inform and influence producers and consumers to move agricultural production toward practices that are environmentally sound and economically viable, balancing the needs of public health and the environment with the needs of industry. Considerable efforts were focused into the following three topics: Air emissions from livestock facilities; Impacts of smoke from pasture burning, a specific air quality problem in Kansas; and Climate change and agriculture. My specific research interests include:

- Air quality monitoring and modeling, fate and transport of air emissions from

agricultural sources, cost effective mitigation strategies.

- Best management practices or plans for agricultural production systems, including waste management, nutrient management, and environmental management, etc.
- Impact of climate change and our strategies, and other environmental issues impacting sustainability of agricultural production.

My web homepage can be visited at <http://www.bae.ksu.edu/~zifeiliu/>



(Associate Editor LONG LIN)

浙江大学生物系统工程与食品科学学院 博士后招聘

为更好地完成国家级课题研究任务，浙江大学生物系统工程与食品科学学院农业部设施农业装备与信息化重点实验室现面向国内外诚聘博士后1人，具体要求如下：

一、研究方向

养殖污水处理与资源化利用

二、应聘条件

- 1、已取得博士学位，年龄在40岁以下，具有较强的英语阅读和写作能力；
- 2、博士学位为环境工程、农业工程等相关专业，具有水处理技术研究背景者优先考虑；
- 3、身体健康、热爱科研工作，具备创新精神、团队协作和敬业精神。

三、申请需要提交的材料

- 1、个人中文或英文简历；
- 2、论文及专利等研究成果清单、1~3篇代表性论文复印件和博士学位论文摘要；
- 3、博士生导师推荐信；
- 4、学位证明复印件；
- 5、其它可以证明本人知识、能力、水平、业绩的相关资料或获奖证明。

四、工作待遇

根据国家、浙江省及浙江大学的有关规定，博士后研究人员在站工作期限原则上为两年，课题组提供相应的科学研究经费，创造科研条件。工作基本薪资待遇：年薪12万，工作业绩优秀者有额外奖励。

五、招聘程序

- 1、应聘者2015年3月15日前，将申请材料电子文档发给联系人；
- 2、初审合格者将被通知面试，面试专家组对应聘者面试，合格者上报浙江大学审批，办理博士后进站手续。

六、联系方式

通讯地址：杭州市余杭塘路866号浙江大学紫金港校区农生环组团D745，310058

联系人：韩老师

E-mail: hanzhiying00@163.com

The 2014 – 2015 AOC IMPACT Editorial Board

Call for News & Activity Reports

The 2014-2015 IMPACT editorial Board invites you earnestly to submit of news and activity reports related to ASABE and AOC. Please send your write-up and/ or picture news to the Editorial Board at aoc.impact@gmail.com. The IMPACT Board will work with you to put your news into the publication.

It is our publication and it is your publication. We sincerely thank each and every AOC members for their support!

征稿启事

2014-2015 IMPACT 编委会真诚邀请您踊跃投稿。任何 ASABE 和 AOC 有关的新闻、活动、图片等均欢迎。

如您有稿件，请寄到邮箱 aoc.impact@gmail.com。

我们将与您通力合作，发表您的稿件。

这是我们的出版物，也是您的出版物。

诚挚感谢您的鼎力支持！

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